UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/370,373	08/10/99	HACKER E	514413-3766

020999
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HM12/0627

EXAMINER	
CLARDY,S	
ART UNIT	**PAPER NUMBER**
1616	13

DATE MAILED: 06/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/370,373	Applicant(s) Hacker et al
	Examiner S. Mark Clardy	Art Unit 1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Apr 23, 2001* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-15* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *5, 7*

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

Claims 1-15 are pending in this application.

Applicants' claims are drawn to uses, compositions, and methods of using herbicidal compositions comprising:

A) a broad spectrum herbicide (glufosinate, glyphosate, imidazolinones, protoporphyrinogen oxidase (PPO) inhibitors, cyclohexanediones, heteroaryloxyphenoxypropionic acids), and

B) a second herbicide (groups B0[1] - B3)

In Paper No. 12, applicant elected with traverse of the species comprising:

A1.2 glufosinate-ammonium[2] and

B1.16 mesotrione[3].

Data for the elected species is provided in Tables 4 and 11 (p. 38 and 43). Applicants traversal of the species election requirement is on the ground(s) that:

1. the invention involves synergistic herbicide combinations for controlling harmful plants in maize, and
2. "the claims are directed to synergistic herbicide combinations from distinct sets of compounds and from a common broad spectrum herbicide (A)".

This is not found persuasive because synergy remains an unpredictable property, thus a reference against one synergistic combination is useless for any other combination of even closely analogous

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[1]Note that the group B0 may be any herbicidewhich is structurally different from those listed in group (A).

[2]Ammonium 2-amino-4-(hydroxymethylphosphinyl)butanoate

[3] 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione

compounds. The instant invention comprises a variety of structurally unrelated compounds in the (B) component, and and a smaller group in the (A) component. While applicants have elected glufosinate as the (A) component, it is noted that it is not the only available choice, as indicated above. Thus, the comment that all compositions have the (A) component in common is puzzling since that component is itself a variable. Applicants' comment that the combinations are selected from distinct sets of compounds argues in favor of a requirement to at least elect a species.

The requirement is still deemed proper and is therefore made FINAL.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 9-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, i.e., the "use" of a composition. These claims are not treated further on the merits. See

Claims 7, 8, and 13-15 have been examined only insofar as they read on the elected species.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 8, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Takematsu et al (US 4,265,654) and Carter et al (US 5,006,158).

Takematsu et al teach glufosinate (formula I) as a herbicidal agent which is useful also in combination with other herbicides such as the cyclohexanedione herbicide alloxydim (identified by chemical name, col 1, lines 36-38).

Carter et al teach that cyclohexanediones such as alloxydim (see generic structure at col 1, lines 40-50) and the triketones such as 2-(2-nitrobenzoyl)-1,3-cyclohexanediones (abstract) such as mesotrione (column 55, Table I-D, compound 26d) were known herbicidal agents. Also as is conventional in the art, the combination of the disclosed triketone herbicides with additional herbicidal agents is disclosed (col 93, lines 64-66).

One of ordinary skill in the art would be motivated to combine these references because it is conventional in the art to combine two or more herbicides to combine the spectrum of activity of each herbicidal agent.

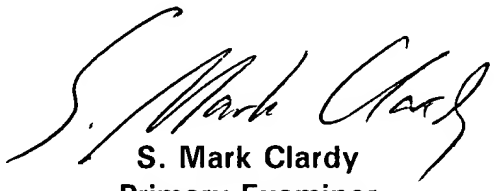
Thus it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have used applicants' elected glufosinate and mesotrione together or in sequence for the control of weeds because the prior art teaches that it was well known to use glufosinate in combination with additional secondary herbicides. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

The data presented in the specification do not demonstrate unexpected results because it cannot be determined if the differences between the expected and observed results are statistically significant (Tables 4 and 11, p. 38 and 43).

No unobvious or unexpected results are noted; no claim is allowed.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.



S. Mark Clardy
Primary Examiner
AU 1616

June 25, 2001